

# SEQUENCE LISTING

<110> Chen, Sei Yu  
Macina, Roberto  
Sun, Yongming  
Recipon, Herve

<120> Compositions and Methods Relating to Lung Specific  
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<212> DNA

<213> Homo sapiens

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<211> 1663

<212> DNA

<213> Homo sapiens

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<210> 19
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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<210> 21  
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<220>  
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<210> 22  
 <211> 19  
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<220>  
 <223> Description of Artificial Sequence: Synthetic

<400> 22  
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<210> 23  
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<400> 23  
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<210> 24  
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<210> 25  
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<223> Description of Artificial Sequence: Synthetic

<400> 25  
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<210> 26  
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<220>  
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<400> 26  
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<210> 27  
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<220>  
<223> Description of Artificial Sequence: Synthetic

<400> 27  
tggtggcggt cctcctgtc 19

<210> 28  
<211> 23  
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<220>  
<223> Description of Artificial Sequence: Synthetic

<400> 28  
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<210> 29  
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<220>  
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<400> 29  
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<210> 30  
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<210> 31  
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<210> 32  
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<400> 32  
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<210> 33  
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<223> Description of Artificial Sequence: Synthetic

<400> 33  
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<210> 34  
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<400> 34  
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<210> 35  
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<400> 35  
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<210> 36  
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114280 4220460

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<210> 41  
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<400> 41  
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<210> 42  
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20220422 10:22:46

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<400> 45  
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<210> 46  
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<400> 46  
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<210> 47  
<211> 22  
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<220>  
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<400> 47  
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<210> 48  
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<210> 49  
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<220>  
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<400> 49  
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<210> 50  
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<210> 51  
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<210> 52  
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<400> 52  
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<210> 54  
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<220>  
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<400> 54  
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<210> 55  
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<210> 56  
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<210> 58  
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27

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24

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<400> 60  
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19

<210> 61  
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<220>  
<223> Description of Artificial Sequence: Synthetic

<400> 61  
tcctttcctt ggcaatctcc tctcctg

27

<210> 62  
<211> 23  
<212> DNA  
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<220>  
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<400> 62  
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23

<210> 63  
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<212> DNA  
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<220>  
<223> Description of Artificial Sequence: Synthetic

<400> 63  
attccagcct gagtcacaca ga

22

<210> 64  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic

<400> 64  
accaaggaga aacaaaaacca agcagca

27

<210> 65  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic

<400> 65  
tgaggagaaa gaagggaatc ac

22

<210> 66  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic

<400> 66  
tcctaaggta gcactatttg gagac

25

<210> 67  
<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic

<400> 67  
agcaatgaag aatgaacttg gagtaaagag tca

33

<210> 68  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic

<400> 68  
atgggcaggt ctttctttcc 20

<210> 69  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic

<400> 69  
aggcagttct gttacccac ta 22

<210> 70  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic

<400> 70  
tgtgctaagg acaggattgg ttgggta 27

<210> 71  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic

<400> 71  
actgccacc acgctttata 20

<210> 72  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic

<400> 72

tgagggtggg gagaggttac

20

<210> 73

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

<400> 73

agtcacatta ttagaggttc gcatctcagg

30

<210> 74

<211> 2722

<212> DNA

<213> Homo sapiens

<400> 74

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ctcagcgaca gcggcgactg cggcgggcgc gggagggcat cccgttgggg atccttccgc 180
acactgaaga gtacgtcttc gggcttacct ctaatcacat aatggctgtg tttaatcaga 240
agtctgtctc ggatatgatt aaagagtttc gaaaaaattg gcggtgctct tgtaactctg 300
agagaactac tctatgtggg gcagactcca tgctcttggc attgcagctt tctatggcgg 360
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attatgagga cgtaggaag atttatgatg atttcttgaa gaacagtaat atgttagatc 540
tgattgatgt ttatcaaaaa ttaggggctt tgacttctaa ttgtgaaaat tataacacag 600
tatctcctag tcaactactg gattttctgt ctggcaaaca gtatgcagta ggtgatgaaa 660
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ttattagaac aatagagctt ggagggaaag gatatgcacc accaccatca gatcctttaa 960
ggacacatgt aaagggattg tctaatttta ttaatttcat tgacaaatta gatgagattc 1020
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tgtactgcc aaggacaagt gatttctggc caggcaaagt taactcagtt ttttagacta 1380
taaatattgt tcttatatgc tttaggttta tgtatctata aaccattcac caaagacatg 1440
cttaattttt aagagatcaa ggtgtaaatt atgatgattt attattttgg tctacagtgt 1500

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atgtaagggtt agtatgttaa gcattgttta aaaatactag taagtcataa ttatgcagaa 1560
ttttcacaaa gtttaatgca cagagaaaagc atatcatttc agttactgat acatcttaac 1620
actactttct tttaaaacag acattttaaca tacacaagtt atagtagcag tatgggcttc 1680
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aagaagaaag tttaaattgt ttaaaggact ataattatca cacaaaattt attaagaaaa 1860
aaagaatgga tctagtataa ctaattctga gtaaaccaaa atgataataa ttaattgttg 1920
ctattttaatc ccacattttt ggcagggtga attgagccat ggtcttattt gattttgtta 1980
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cagctcaggc gggacaggag cg 2722

```

<210> 75

<211> 64

<212> PRT

<213> Homo sapiens

<400> 75

```

Val Leu Asn Ala Phe Leu Gln Pro Pro Gly Arg Gln Met Ile Ala Ile
  1                   5                   10                   15

```

```

Arg Lys Arg Gln Pro Glu Glu Thr Asn Asn Asp Tyr Glu Thr Ala Asp
      20                   25                   30

```

```

Gly Gly Tyr Met Thr Leu Asn Pro Arg Ala Pro Thr Asp Asp Asp Lys
      35                   40                   45

```

```

Asn Ile Tyr Leu Thr Leu Pro Pro Asn Asp His Val Asn Ser Asn Asn
      50                   55                   60

```

<210> 76

<211> 261

<212> PRT

<213> Homo sapiens

<400> 76

Met Ser Thr Thr Thr Cys Gln Val Val Ala Phe Leu Leu Ser Ile Leu  
1 5 10 15  
Gly Leu Ala Gly Cys Ile Ala Ala Thr Gly Met Asp Met Trp Ser Thr  
20 25 30  
Gln Asp Leu Tyr Asp Asn Pro Val Thr Ser Val Phe Gln Tyr Glu Gly  
35 40 45  
Leu Trp Arg Ser Cys Val Arg Gln Ser Ser Gly Phe Thr Glu Cys Arg  
50 55 60  
Pro Tyr Phe Thr Ile Leu Gly Leu Pro Ala Met Leu Gln Ala Val Arg  
65 70 75 80  
Ala Leu Met Ile Val Gly Ile Val Leu Gly Ala Ile Gly Leu Leu Val  
85 90 95  
Ser Ile Phe Ala Leu Lys Cys Ile Arg Ile Gly Ser Met Glu Asp Ser  
100 105 110  
Ala Lys Ala Asn Met Thr Leu Thr Ser Gly Ile Met Phe Ile Val Ser  
115 120 125  
Gly Leu Cys Ala Ile Ala Gly Val Ser Val Phe Ala Asn Met Leu Val  
130 135 140  
Thr Asn Phe Trp Met Ser Thr Ala Asn Met Tyr Thr Gly Met Gly Gly  
145 150 155 160  
Met Val Gln Thr Val Gln Thr Arg Tyr Thr Phe Gly Ala Ala Leu Phe  
165 170 175  
Val Gly Trp Val Ala Gly Gly Leu Thr Leu Ile Gly Gly Val Met Met  
180 185 190  
Cys Ile Ala Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr Lys Ala  
195 200 205  
Val Ser Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro Gly Gly  
210 215 220  
Phe Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys Lys Ile  
225 230 235 240

Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr Pro Ser  
245 250 255

Lys His Asp Tyr Val  
260

<210> 77

<211> 1461

<212> PRT

<213> Homo sapiens

<400> 77

Met Glu Ala Arg Ser Arg Ser Ala Glu Glu Leu Arg Arg Ala Glu Leu  
1 5 10 15

Val Glu Ile Ile Val Glu Thr Glu Ala Gln Thr Gly Val Ser Gly Ile  
20 25 30

Asn Val Ala Gly Gly Gly Lys Glu Gly Ile Phe Val Arg Glu Leu Arg  
35 40 45

Glu Asp Ser Pro Ala Ala Arg Ser Leu Ser Leu Gln Glu Gly Asp Gln  
50 55 60

Leu Leu Ser Ala Arg Val Phe Phe Glu Asn Phe Lys Tyr Glu Asp Ala  
65 70 75 80

Leu Arg Leu Leu Gln Cys Ala Glu Pro Tyr Lys Val Ser Phe Cys Leu  
85 90 95

Lys Arg Thr Val Pro Thr Gly Asp Leu Ala Leu Arg Pro Gly Thr Val  
100 105 110

Ser Gly Tyr Glu Ile Lys Gly Pro Arg Ala Lys Val Ala Lys Leu Asn  
115 120 125

Ile Gln Ser Leu Ser Pro Val Lys Lys Lys Lys Met Val Pro Gly Ala  
130 135 140

Leu Gly Val Pro Ala Asp Leu Ala Pro Val Asp Val Glu Phe Ser Phe  
145 150 155 160

Pro Lys Phe Ser Arg Leu Arg Arg Gly Leu Lys Ala Glu Ala Val Lys  
165 170 175

Gly Pro Val Pro Ala Ala Pro Ala Arg Arg Arg Leu Gln Leu Pro Arg  
180 185 190

Leu Arg Val Arg Glu Val Ala Glu Glu Ala Gln Ala Ala Arg Leu Ala  
195 200 205

Ala Ala Ala Pro Pro Pro Arg Lys Ala Lys Val Glu Ala Glu Val Ala  
210 215 220

Ala Gly Ala Arg Phe Thr Ala Pro Gln Val Glu Leu Val Gly Pro Arg  
225 230 235 240

Leu Pro Gly Ala Glu Val Gly Val Pro Gln Val Ser Ala Pro Lys Ala  
245 250 255

Ala Pro Ser Ala Glu Ala Ala Gly Gly Phe Ala Leu His Leu Pro Thr  
260 265 270

Leu Gly Leu Gly Ala Pro Ala Pro Pro Ala Val Glu Ala Pro Ala Val  
275 280 285

Gly Ile Gln Val Pro Gln Val Glu Leu Pro Ala Leu Pro Ser Leu Pro  
290 295 300

Thr Leu Pro Thr Leu Pro Cys Leu Glu Thr Arg Glu Gly Ala Val Ser  
305 310 315 320

Val Val Val Pro Thr Leu Asp Val Ala Ala Pro Thr Val Gly Val Asp  
325 330 335

Leu Ala Leu Pro Gly Ala Glu Val Glu Ala Arg Gly Glu Ala Pro Glu  
340 345 350

Val Ala Leu Lys Met Pro Arg Leu Ser Phe Pro Arg Phe Gly Ala Arg  
355 360 365

Ala Lys Glu Val Ala Glu Ala Lys Val Ala Lys Val Ser Pro Glu Ala  
370 375 380

Arg Val Lys Gly Pro Arg Leu Arg Met Pro Thr Phe Gly Leu Ser Leu  
385 390 395 400

Leu Glu Pro Arg Pro Ala Ala Pro Glu Val Val Glu Ser Lys Leu Lys  
405 410 415

Leu Pro Thr Ile Lys Met Pro Ser Leu Gly Ile Gly Val Ser Gly Pro  
420 425 430

Glu Val Lys Val Pro Lys Gly Pro Glu Val Lys Leu Pro Lys Ala Pro  
435 440 445

Glu Val Lys Leu Pro Lys Val Pro Glu Ala Ala Leu Pro Glu Val Arg	450	455	460
Leu Pro Glu Val Glu Leu Pro Lys Val Ser Glu Met Lys Leu Pro Lys	465	470	475 480
Val Pro Glu Met Ala Val Pro Glu Val Arg Leu Pro Glu Val Glu Leu	485	490	495
Pro Lys Val Ser Glu Met Lys Leu Pro Lys Val Pro Glu Met Ala Val	500	505	510
Pro Glu Val Arg Leu Pro Glu Val Gln Leu Leu Lys Val Ser Glu Met	515	520	525
Lys Leu Pro Lys Val Pro Glu Met Ala Val Pro Glu Val Arg Leu Pro	530	535	540
Glu Val Gln Leu Pro Lys Val Ser Glu Met Lys Leu Pro Glu Val Ser	545	550	555 560
Glu Val Ala Val Pro Glu Val Arg Leu Pro Glu Val Gln Leu Pro Lys	565	570	575
Val Pro Glu Met Lys Val Pro Glu Met Lys Leu Pro Lys Val Pro Glu	580	585	590
Met Lys Leu Pro Glu Met Lys Leu Pro Glu Val Gln Leu Pro Lys Val	595	600	605
Pro Glu Met Ala Val Pro Asp Val His Leu Pro Glu Val Gln Leu Pro	610	615	620
Lys Val Pro Glu Met Lys Leu Pro Glu Met Lys Leu Pro Glu Val Lys	625	630	635 640
Leu Pro Lys Val Pro Glu Met Ala Val Pro Asp Val His Leu Pro Glu	645	650	655
Val Gln Leu Pro Lys Val Pro Glu Met Lys Leu Pro Lys Met Pro Glu	660	665	670
Met Ala Val Pro Glu Val Arg Leu Pro Glu Val Gln Leu Pro Lys Val	675	680	685
Ser Glu Met Lys Leu Pro Lys Val Pro Glu Met Ala Val Pro Asp Val	690	695	700





0954027 002701  
T02300 1220650

Thr Val Pro Gln Leu Glu Leu Asp Val Gly Leu Ser Arg Glu Ala Gln  
1220 1225 1230

Ala Gly Glu Ala Ala Thr Gly Glu Gly Gly Leu Arg Leu Lys Leu Pro  
1235 1240 1245

Thr Leu Gly Ala Arg Ala Arg Val Gly Gly Glu Gly Ala Glu Glu Gln  
1250 1255 1260

Pro Pro Gly Ala Glu Arg Thr Phe Cys Leu Ser Leu Pro Asp Val Glu  
1265 1270 1275 1280

Leu Ser Pro Ser Gly Gly Asn His Ala Glu Tyr Gln Val Ala Glu Gly  
1285 1290 1295

Glu Gly Glu Ala Gly His Lys Leu Lys Val Arg Leu Pro Arg Phe Gly  
1300 1305 1310

Leu Val Arg Ala Lys Glu Gly Ala Glu Glu Gly Glu Lys Ala Lys Ser  
1315 1320 1325

Pro Lys Leu Arg Leu Pro Arg Val Gly Phe Ser Gln Ser Glu Met Val  
1330 1335 1340

Thr Gly Glu Gly Ser Pro Ser Pro Glu Glu Glu Glu Glu Glu Glu  
1345 1350 1355 1360

Glu Gly Ser Gly Glu Gly Ala Ser Gly Arg Arg Gly Arg Val Arg Val  
1365 1370 1375

Arg Leu Pro Arg Val Gly Leu Ala Ala Pro Ser Lys Ala Ser Arg Gly  
1380 1385 1390

Gln Glu Gly Asp Ala Ala Pro Lys Ser Pro Val Arg Glu Lys Ser Pro  
1395 1400 1405

Lys Phe Arg Phe Pro Arg Val Ser Leu Ser Pro Lys Ala Arg Ser Gly  
1410 1415 1420

Ser Gly Asp Gln Glu Glu Gly Gly Leu Arg Val Arg Leu Pro Ser Val  
1425 1430 1435 1440

Gly Phe Ser Glu Thr Gly Ala Pro Gly Pro Ala Arg Met Glu Gly Ala  
1445 1450 1455

Gln Ala Ala Ala Val  
1460

<210> 78  
 <211> 879  
 <212> PRT  
 <213> Homo sapiens

<400> 78

Arg Glu Leu Trp Thr Phe Ala Gly Ser Arg Asp Pro Ser Ala Pro Arg  
 1 5 10 15

Leu Ala Tyr Gly Tyr Gly Pro Gly Ser Leu Arg Glu Leu Arg Ala Arg  
 20 25 30

Glu Phe Ser Arg Leu Ala Gly Thr Val Tyr Leu Asp His Ala Gly Ala  
 35 40 45

Thr Leu Phe Ser Gln Ser Gln Leu Glu Ser Phe Thr Ser Asp Leu Met  
 50 55 60

Glu Asn Thr Tyr Gly Asn Pro His Ser Gln Asn Ile Ser Ser Lys Leu  
 65 70 75 80

Thr His Asp Thr Val Glu Gln Val Arg Tyr Arg Ile Leu Ala His Phe  
 85 90 95

His Thr Thr Ala Glu Asp Tyr Thr Val Ile Phe Thr Ala Gly Ser Thr  
 100 105 110

Ala Ala Leu Lys Leu Val Ala Glu Ala Phe Pro Trp Val Ser Gln Gly  
 115 120 125

Pro Glu Ser Ser Gly Ser Arg Phe Cys Tyr Leu Thr Asp Ser His Thr  
 130 135 140

Ser Val Val Gly Met Arg Asn Val Thr Met Ala Ile Asn Val Ile Ser  
 145 150 155 160

Ile Pro Val Arg Pro Glu Asp Leu Trp Ser Ala Glu Glu Arg Gly Ala  
 165 170 175

Ser Ala Ser Asn Pro Asp Cys Gln Leu Pro His Leu Phe Cys Tyr Pro  
 180 185 190

Ala Gln Ser Asn Phe Ser Gly Val Arg Tyr Pro Leu Ser Trp Ile Glu  
 195 200 205

Glu Val Lys Ser Gly Arg Leu Arg Pro Val Ser Thr Pro Gly Lys Trp



465		470		475		480
Leu His Ser Ser Gly Asp Trp Pro Val Pro Gln Ala His Ala Asp Thr						
	485		490		495	
Gly Glu Thr Gly Ala Pro Ser Ala Asp Ser Gln Ala Asp Val Ile Pro						
	500		505		510	
Ala Val Met Gly Arg Arg Ser Leu Ser Pro Gln Glu Asp Ala Leu Thr						
	515		520		525	
Gly Ser Arg Val Trp Asn Asn Ser Ser Thr Val Asn Ala Val Pro Val						
	530		535		540	
Ala Pro Pro Val Cys Asp Val Ala Arg Thr Gln Pro Thr Pro Ser Glu						
	545		550		555	560
Lys Ala Ala Gly Val Leu Glu Gly Ala Leu Gly Pro His Val Val Thr						
	565		570		575	
Asn Leu Tyr Leu Tyr Pro Ile Lys Ser Cys Ala Ala Phe Glu Val Thr						
	580		585		590	
Arg Trp Pro Val Gly Asn Gln Gly Leu Leu Tyr Asp Arg Ser Trp Met						
	595		600		605	
Val Val Asn His Asn Gly Val Cys Leu Ser Gln Lys Gln Glu Pro Arg						
	610		615		620	
Leu Cys Leu Ile Gln Pro Phe Ile Asp Leu Arg Gln Arg Ile Met Val						
	625		630		635	640
Ile Lys Ala Lys Gly Met Glu Pro Ile Glu Val Pro Leu Glu Glu Asn						
	645		650		655	
Ser Glu Arg Thr Gln Ile Arg Gln Ser Arg Val Cys Ala Asp Arg Val						
	660		665		670	
Ser Thr Tyr Asp Cys Gly Glu Lys Ile Ser Ser Trp Leu Ser Thr Phe						
	675		680		685	
Phe Gly Arg Pro Cys His Leu Ile Lys Gln Ser Ser Asn Ser Gln Arg						
	690		695		700	
Asn Ala Lys Lys Lys His Gly Lys Asp Gln Leu Pro Gly Thr Met Ala						
	705		710		715	720
Thr Leu Ser Leu Val Asn Glu Ala Gln Tyr Leu Leu Ile Asn Thr Ser						

Trp Leu Val Thr Ser

725

730

735

Ser Ile Leu Glu Leu His Arg Gln Leu Asn Thr Ser Asp Glu Asn Gly  
740 745 750

Lys Glu Glu Leu Phe Ser Leu Lys Asp Leu Ser Leu Arg Phe Arg Ala  
755 760 765

Asn Ile Ile Ile Asn Gly Lys Arg Ala Phe Glu Glu Glu Lys Trp Asp  
770 775 780

Glu Ile Ser Ile Gly Ser Leu Arg Phe Gln Val Leu Gly Pro Cys His  
785 790 795 800

Arg Cys Gln Met Ile Cys Ile Asp Gln Gln Thr Gly Gln Arg Asn Gln  
805 810 815

His Val Phe Gln Lys Leu Ser Glu Ser Arg Glu Thr Lys Val Asn Phe  
820 825 830

Gly Met Tyr Leu Met His Ala Ser Leu Asp Leu Ser Ser Pro Cys Phe  
835 840 845

Leu Ser Val Gly Ser Gln Val Leu Pro Val Leu Lys Glu Asn Val Glu  
850 855 860

Gly His Asp Leu Pro Ala Ser Glu Lys His Gln Asp Val Thr Ser  
865 870 875

<210> 79

<211> 107

<212> PRT

<213> Homo sapiens

<400> 79

Ser Phe Phe Phe Phe Leu Arg Ala Ser Leu Thr Leu Ser Pro Arg Leu  
1 5 10 15

Glu Cys Ser Gly Thr Ile Ala Ala His Cys Asn Pro His Leu Pro Gly  
20 25 30

Ser Ser Asn Tyr Ala Ala Ser Ala Ser Gln Glu Ala Gly Thr Ser Gly  
35 40 45

Met Ser His His Thr Trp Ile Ile Phe Cys Ile Phe Leu Val Glu Thr  
50 55 60

Gly Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Ser Ser Ser  
65 70 75 80

Asp Ser Pro Pro Thr Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly Met  
85 90 95

Ser His His Ala Gln Pro Ala Thr Leu Ser Phe  
100 105

<210> 80

<211> 93

<212> PRT

<213> Homo sapiens

<400> 80

Gln Asp Arg Ile Ile Asn Leu Val Val Gly Ser Leu Thr Ser Leu Leu  
1 5 10 15

Ile Leu Val Thr Leu Ile Ser Ala Phe Val Phe Pro Gln Leu Pro Pro  
20 25 30

Lys Pro Leu Asn Ile Phe Phe Ala Val Cys Ile Ser Leu Ser Ser Ile  
35 40 45

Thr Ala Cys Ile Leu Ile Tyr Trp Tyr Arg Gln Gly Asp Leu Glu Pro  
50 55 60

Lys Phe Arg Lys Leu Ile Tyr Tyr Ile Ile Phe Ser Ile Ile Met Leu  
65 70 75 80

Cys Ile Cys Ala Asn Leu Tyr Phe His Asp Val Gly Arg  
85 90

<210> 81

<211> 498

<212> PRT

<213> Homo sapiens

<400> 81

Met Asp Val Thr Asp His Tyr Glu Asp Val Arg Lys Ile Tyr Asp Asp  
1 5 10 15

Phe Leu Lys Asn Ser Asn Met Leu Asp Leu Ile Asp Val Tyr Gln Lys  
20 25 30

Cys Arg Ala Leu Thr Ser Asn Cys Glu Asn Tyr Asn Thr Val Ser Pro

35

40

45

Ser Gln Leu Leu Asp Phe Leu Ser Gly Lys Gln Tyr Ala Val Gly Asp  
50 55 60

Glu Thr Asp Leu Ser Ile Pro Thr Ser Pro Thr Ser Lys Tyr Asn Arg  
65 70 75 80

Asp Asn Glu Lys Val Gln Leu Leu Ala Arg Lys Ile Ile Phe Ser Tyr  
85 90 95

Leu Asn Leu Leu Val Asn Ser Lys Asn Asp Leu Ala Val Ala Tyr Ile  
100 105 110

Leu Asn Ile Pro Asp Arg Gly Leu Gly Arg Glu Ala Phe Thr Asp Leu  
115 120 125

Lys His Ala Ala Arg Glu Lys Gln Met Ser Ile Phe Leu Val Ala Thr  
130 135 140

Ser Phe Ile Arg Thr Ile Glu Leu Gly Gly Lys Gly Tyr Ala Pro Pro  
145 150 155 160

Pro Ser Asp Pro Leu Arg Thr His Val Lys Gly Leu Ser Asn Phe Ile  
165 170 175

Asn Phe Ile Asp Lys Leu Asp Glu Ile Leu Gly Glu Ile Pro Asn Pro  
180 185 190

Ser Ile Ala Gly Gly Gln Ile Leu Ser Val Ile Lys Met Gln Leu Ile  
195 200 205

Lys Gly Gln Asn Ser Arg Asp Pro Phe Cys Lys Ala Ile Glu Glu Val  
210 215 220

Ala Gln Asp Leu Asp Leu Arg Ile Lys Asn Ile Ile Asn Ser Gln Glu  
225 230 235 240

Gly Val Val Ala Leu Ser Thr Thr Asp Ile Ser Pro Ala Arg Pro Lys  
245 250 255

Ser His Ala Ile Asn His Gly Thr Ala Tyr Cys Gly Arg Asp Thr Val  
260 265 270

Lys Ala Leu Leu Val Leu Leu Asp Glu Glu Ala Ala Asn Ala Pro Thr  
275 280 285

Lys Asn Lys Ala Glu Leu Leu Tyr Asp Glu Glu Asn Thr Ile His His

TP2237-22460

290

295

300

His Gly Thr Ser Ile Leu Thr Leu Phe Arg Ser Pro Thr Gln Val Asn  
305 310 315 320

Asn Ser Ile Lys Pro Leu Arg Glu Arg Ile Cys Val Ser Met Gln Glu  
325 330 335

Lys Lys Ile Lys Met Lys Gln Thr Leu Ile Arg Ser Gln Phe Ala Cys  
340 345 350

Thr Tyr Lys Asp Asp Tyr Met Ile Ser Lys Asp Asn Trp Asn Asn Val  
355 360 365

Asn Leu Ala Ser Lys Pro Leu Cys Val Leu Tyr Met Glu Asn Asp Leu  
370 375 380

Ser Glu Gly Val Asn Pro Ser Val Gly Arg Ser Thr Ile Gly Thr Ser  
385 390 395 400

Phe Gly Asn Val His Leu Asp Arg Ser Lys Asn Glu Lys Val Ser Arg  
405 410 415

Lys Ser Thr Ser Gln Thr Gly Asn Lys Ser Ser Lys Arg Lys Gln Val  
420 425 430

Asp Leu Asp Gly Glu Asn Ile Leu Cys Asp Asn Arg Asn Glu Pro Pro  
435 440 445

Gln His Lys Asn Ala Lys Ile Pro Lys Lys Ser Asn Asp Ser Gln Asn  
450 455 460

Arg Leu Tyr Gly Lys Leu Ala Lys Val Ala Lys Ser Asn Lys Cys Thr  
465 470 475 480

Ala Lys Asp Lys Leu Ile Ser Gly Gln Ala Lys Leu Thr Gln Phe Phe  
485 490 495

Arg Leu

<210> 82

<211> 104

<212> PRT

<213> Homo sapiens

<400> 82

Phe Tyr Lys Arg Glu Leu Leu Phe Phe Cys Cys Cys Phe Phe Ala Asp  
 1 5 10 15  
 Ser Thr Ile Ser Ala His Cys Gly Leu His Leu Met Asp Ala Arg Asp  
 20 25 30  
 Pro Pro Thr Ser Ala Ser Gln Ala Gly Thr Thr Val Val Asn His His  
 35 40 45  
 Ala Cys Leu Leu Phe Lys Phe Cys Val Glu Met Arg Ser His Cys Ile  
 50 55 60  
 Ala Ala Ala Gly Leu Glu Leu Leu Val Ser Ser Asn Pro Pro Ser Ser  
 65 70 75 80  
 Val Phe Gln Ser Ala Gly Ile Thr Gly Val Ser His Cys Ala Leu Pro  
 85 90 95  
 Asn Met Gly Ser Phe Arg His Ala  
 100

<210> 83  
 <211> 216  
 <212> PRT  
 <213> Homo sapiens

<400> 83  
 Ser Glu Glu Thr Ile Thr Thr Thr Ile Gln Asp Leu Phe Pro Lys Val  
 1 5 10 15  
 Met Lys Lys Met Arg Val Pro Ile Thr Leu Gly Cys Cys Leu Val Leu  
 20 25 30  
 Phe Leu Leu Gly Leu Val Cys Val Thr Gln Ala Gly Ile Tyr Trp Val  
 35 40 45  
 His Leu Ile Asp His Phe Cys Ala Gly Trp Gly Ile Leu Ile Ala Ala  
 50 55 60  
 Ile Leu Glu Leu Val Gly Ile Ile Trp Ile Tyr Gly Gly Asn Arg Phe  
 65 70 75 80  
 Ile Glu Asp Thr Glu Met Met Ile Gly Ala Lys Arg Trp Ile Phe Trp  
 85 90 95  
 Leu Trp Trp Arg Ala Cys Trp Phe Val Ile Thr Pro Ile Leu Leu Ile  
 100 105 110

Ala Ile Phe Ile Trp Ser Leu Val Gln Phe His Arg Pro Asn Tyr Gly  
115 120 125

Ala Ile Pro Tyr Pro Asp Trp Gly Val Ala Leu Gly Trp Cys Met Ile  
130 135 140

Val Phe Cys Ile Ile Trp Ile Pro Ile Met Ala Ile Ile Lys Ile Ile  
145 150 155 160

Gln Ala Lys Gly Asn Ile Phe Gln Arg Leu Ile Ser Cys Cys Arg Pro  
165 170 175

Ala Ser Asn Trp Gly Pro Tyr Leu Glu Gln His Arg Gly Glu Arg Tyr  
180 185 190

Lys Asp Met Val Val Pro Lys Lys Glu Ala Gly His Glu Ile Pro Thr  
195 200 205

Val Ser Gly Ser Arg Lys Pro Glu  
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Leu Pro Arg Leu Ser Ala Trp Val Arg Glu Gln Cys Pro Gly Pro Gly  
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Ser Arg Cys Thr Asn Ile Ile Ala Gly Asp Phe Ile Gly Ala Asp Gly  
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Phe Val Ser Asp Val Ile Ala Leu Asn Gln Lys Leu Leu Trp Cys  
65 70 75